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Título del trabajo en español	“Sporty Bellies”: 1er año del proyecto.
Título del trabajo en inglés	“Sporty Bellies”: the first year of the project
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RESUMEN COMUNICACIÓN/PÓSTER EN ESPAÑOL E INGLÉS

RESUMEN ESPAÑOL COMUNICACIÓN/PÓSTER

El ejercicio físico durante el embarazo es considerado en la actualidad uno de los factores influyentes en la mejora de la salud materna y neonatal. La realización de actividad física diaria, además de ayudar en el control de ganancia de peso durante la gestación también contribuye a la creación de los estados de ánimo más positivos, la reducción de los síntomas de la depresión durante el embarazo y después del parto.

Con el fin de apoyar y alentar a las mujeres embarazadas para practicar la actividad física surge el proyecto Sporty Bellies. En 2016, en el 12º Congreso Internacional de Ciencias del Deporte y la Salud, hicimos una presentación de este mismo proyecto. Dando continuidad a lo que se presentó, tenemos la intención de con este nuevo artículo, hacer una caracterización de los participantes y un análisis del desarrollo del proyecto en el 1er año.

Un total de 313 mujeres embarazadas, de 18 a 44 años, con una media (desviación estándar) de 31,35 (4,13) participaron en este estudio. La edad gestacional en la cual comenzaron el programa es 14,3 (5,7) semanas. Antes del embarazo, 88 (28,3) tenían sobrepeso y eran obesos. Con respecto a los hábitos de vida de la mujer embarazada, 180 (58,1) practican actividad física regularmente y 28 (8,4) tienen hábitos de fumar. En el comienzo del programa, 18 (6%) de los participantes presentan resultados que indican la presencia de síntomas depresivos y en cuanto al nivel de actividad física, la media (DE) del gasto energético semanal es de 172,1 Met- h.wk⁻¹ (98,1). En el primer año del proyecto se llevaron a cabo alrededor de 180 clases, de las cuales 46 en la piscina y el promedio de alumnos por clase en este año fueron de 11.

Palabras clave en español (3-5 palabras):

Embarazo, programa de intervención, actividad física

RESUMEN INGLÉS COMUNICACIÓN/PÓSTER

Physical activity during pregnancy is currently considered one important determinant in the improvement of maternal and neonatal health status. Performing recommended daily physical activity, in addition to helping the control of gestational weight gain, also contributes to the creation of more positive mood states by reducing the symptoms of depression during pregnancy and after childbirth. In order to support and encourage pregnant women to practice physical activity, we developed the project “Sporty Bellies”. With this study, we aim to describe the baseline characteristics of the participants.

During 2015/2016 we developed an intervention program with 313 pregnant women, aged 18-44 years, with a mean (standard deviation) of 31.35 (4.13) participated in this study. The gestational age at which they started the program was 14.3 (5.7) weeks. Before pregnancy, 88 (28,3) were overweight and obese. Concerning the lifestyles, 180 (58.1) were involved in physical activity regularly and had a weekly energy expenditure of 172,1 (98,1) Met- h.wk⁻¹. 28 (8,4) had smoking habit and at the beginning of the program, 18 (6%) had depressive symptoms. In the 1st year of the project, about 180 classes were carried out, 46 of which were in the pool and the average number of students per class in this year was 11.

This study emphasizes the need of intervention programs aiming at improving lifestyles in pregnant women.

Palabras clave en inglés (3-5 palabras):

Pregnancy, intervention program, physical activity

Introduction and objectives

For many years, exercise has been thought to impair the fetus or promote adverse outcomes, such as preterm delivery or restrictions on fetal growth (Davies et al., 2003). However, the guidelines published recently (ACOG, 2015) recommend regular physical activity during pregnancy, with moderate intensity, at least 30 minutes a day, every day or most days when there are no medical or obstetric contraindications.

Regular physical activity at this stage may be important not only during pregnancy, but also beyond it. It is expected a better control of weight gain (Gorman et al., 2004), prevention and treatment of diseases such as pre-eclampsia, urinary incontinence and gestational diabetes (Kocaoz, Eroglu, & Sivaslioglu, 2013; Wolf, Owe, Juhl, & Hegaard, 2014). Additionally, physical activity may be associated to more positive mood states, reduction of postpartum depression (Gorman et al., 2004), maintenance or increase of physical capacity (Mottola, 2013) and postpartum recovery (Szumilewicz et al., 2013). At birth, physical activity may shorten duration of delivery and epidural needs (Szumilewicz et al., 2013) and also reduce cesarean deliveries (Tinloy et al., 2014). Physical activity may still influence the health of the newborn (Mottola, 2013). There is an improvement in the Apgar score at the 1st and 5th minutes and a change in the intrauterine environment, which will affect the fetal development and consequent child's life (ACOG, 2015; Siebel, Carey, & Kingwell, 2012).

Despite all known recommendations and benefits, it is known that the level of physical activity tends to decrease from the onset of pregnancy (Tendais, Figueiredo, & Mota, 2007), whether in domestic or occupational tasks, mainly due to a lack of knowledge and information about the benefits of physical activity as well as cultural habits (Zhang et al., 2014).

In this sense, the "Sporty Bellies" project, a partnership between the University of Minho, Alto Ave Hospital Center and Guimarães City Hall, aims to inform and encourage pregnant women in the municipality of Guimarães to adopt healthy lifestyles, through an intervention program based on the promotion of physical activity.

In this particularly study, we aim to describe the participants' characteristics at baseline.

Methodology

Participants

313 pregnant women from Guimarães (Portugal), aged 18-44 years, with a mean (standard deviation) of 31.35 (4.13) participated in this study. The majority had an educational qualification up to the 12th year (56.2%) and are positioned in the highest socio-economic classes (1 and 2), according to the Graffar index (61.2%). Of the 104 participants who already had more children, 30 (30.9%) had a cesarean birth in the previous pregnancy.

Instruments

At the beginning of the program, information about the socio-demographic profile was collected, as well as physical activity habits, symptoms of depression and anthropometry of pregnant.

The socio-demographic profile was evaluated by a questionnaire developed for this purpose, which include questions about the subject's socio-demographic characteristics, general information on lifestyle habits and previous pregnancies.

"Pregnancy Physical Activity Questionnaire" (PPAQ) validated for the Portuguese pregnant women (Mesquita, 2015) was used to collect the physical activity level.

The information related to depressive symptoms was analyzed by the "Edinburgh Postnatal Depression Scale" (EPDS) questionnaire, previously used in Portugal (Areias, Kumar, Barros, & Figueiredo, 1996).

BMI (kg / m²) of the pregnant was computed, through self-reported weight and height, before and during pregnancy, according to the information of "pregnancy book" that all pregnant have in Portugal.

Results

During the first year of the project (between November 2015 and November 2016), about 180 classes were held, 46 of which were in water. Five teachers of Physical Education were involved in the project and three classes were created with different schedules to respond to the high number of inscriptions in the classes. The average number of students per class in this 1st year was 12 in the class of pavilion and 10 in the class of pool. Each month, multi-purpose information sessions were held for all pregnant women participating in the program, with different themes: breastfeeding; safety with the newborn within the first 24 hours; massage for babies; postpartum exercise; eating patterns during pregnancy; development in the first year of life.

Before pregnancy, of the 313 participants, 10 (%) were underweight, 213 (%) were normal weight, 64 (%) were overweight and 24 (%) were obese.

Additionally, 180 (58,1%) pregnant and 199 (64,2%) baby's fathers had physical exercise. The majority of them did not have tobacco habits (91,6% e 65,2% respectively).

As regards to the depressive symptoms, on a scale of 0 to 30, the mean symptomatology was 5,4 with a standard deviation of 3,5. Considering the cutoff of 12 points indicating the likely of depression, we found that 18 (6%) presented depressive symptoms at this stage.

The level of physical activity, analyzed through the weekly energy expenditure, was 172,1 (98,1) Met- h.wk⁻¹, most of it spent in light-intensity activities (63,6%). The type of activity with major energy expenditure was occupational/caregiving (48,6%) and domestics (33,4%).

Discussion

Studies indicate that regular physical activity during pregnancy has a positive impact on the health of both the pregnant woman and the newborn, and that's why it is necessary to identify ways to maintain or increase physical activity at this stage.

Before pregnancy, 88 (28,3) were overweight and obese and 133 (41,9) did not practice any type of physical exercise.

With this program we intend to raise awareness among all participants for the adoption of healthy lifestyles and that these habits contribute positively to the health of the mother and the baby.

Conclusions

This study shows a low level of physical activity at the beginning of pregnancy and a high prevalence of overweight and obesity. It emphasizes the need to develop intervention programs aiming at increasing physical activity during pregnancy.

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